REMARKS

In the Office Action dated October 6, 2008, Claims 40-52 are pending and under consideration. Claims 40-52 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Gerolymatos (U.S. Patent No. 5,994,323), in view of Bourdrie (U.S. Publication 2002/0111384) and Kaminski (U.S. Patent No. 5,889,033).

Gerolymatos discloses treating Alzheimer's disease (AD) with clioquinol, as well as co-administration of clioquinol and vitamin B12. The Examiner admits that Gerolymatos does not specifically teach the treatment of symptoms of Huntington's disease (HD) with clioquinol. However, citing the secondary references to Bourdrie and to Kaminski, the Examiner contends that there is a significant overlap in symptoms of AD and HD. Therefore, the Examiner concludes that those skilled in the art would have been motivated, and also would have had a reasonable expectation of success, to treat symptoms of HD with clioquinol, as presently claimed. Further, the Examiner admits that Gerolymatos does not specifically teach the dosage range of 100-1500 mg/day of clioquinol, as presently recited in the claims. However, the Examiner considers it obvious for those skilled in the art to optimize the dose of clioquinol in order to arrive at the claimed dosage range.

Applicants respectfully disagree. Applicants respectfully submit that HD and AD are distinct disorders that differ in their genetic origins, fundamental pathologies and patient symptoms, and therefore therapeutic treatments for one disease would not be expected to necessarily apply to the other.

HD is a rare autosomal dominant neurological disorder that causes progressive cognitive, motor, and psychiatric dysfunction over a 10- to 20-year disease course, leading to death. HD is caused by CAG-repeat expansion in the 5 region of the IT15 gene that encodes

the 350-kDa protein huntingtin (Htt). The expanded CAG region encodes polyglutamine (polyQ). When the polyQ region is 40 residues or more, there is virtually 100% penetrance of the disease phenotype. The physiologic roles of Htt are not fully understood; however, it was recently found to be important for vesicular transport of brain-derived neurotrophic factor in axons. Applicants have provided herewith an article by Gusella and MacDonald, Trends in Biochem. Sciences 31: 533-540 (2006) (**Exhibit 1**), which reviews the pathogenic process of HD and its genetic basis.

As HD progresses, the movement disorder becomes more pronounced, and cognitive deficits as well as psychiatric disturbances occur. Virtually any type of movement disorder is seen and cognitive dysfunction can include dementia and difficulties with executive functioning. Psychiatric disturbances most commonly manifest as apathy and depression, but obsessive-compulsive disorder, psychosis, paranoia, and substance abuse also occur.

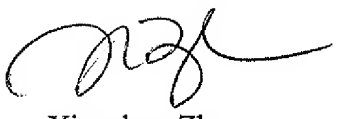
Whilst there is evidence of a heritable predisposition for some forms of Alzheimer's Disease (AD), in contrast to HD, AD does not have a pathology directly attributable to a clear and dominant genetic disorder. AD is divided into 'familial' (approximately 25% occurrence) and 'sporadic' (75%). Familial AD is closely associated with mutations in the APP, PSEN1, and PSEN2 genes. Variations of the APOE gene also increase the risk of developing AD. Familial AD can be divided into early-onset disease (symptoms begin before age 65) and late-onset disease (after age 65). Sporadic AD occurs in people with no history of the disorder in their family, a fact that makes the cause and treatment of the disease highly confounding for researchers. Virtually all sporadic Alzheimer disease begins after age 65, and the risk of developing this condition increases as a person gets older.

Whether familial or sporadic, the brains of AD patients display abnormal deposits which mostly include β-amyloid protein (Aβ). AD is marked pathologically by severe cortical atrophy and the triad of senile plaques; neurofibrillary tangles and neuropil threads. Symptoms of the disease include progressive memory loss, personality and behavioral changes, trouble interacting in a socially appropriate manner, agitation, restlessness, withdrawal, and problems with speech.

In summary, due to the vast genetic, pathological and symptomatic differences between Alzheimer's and Huntington's diseases, a person skilled in the art would have had no reasonable expectation that any treatment for one disease would also be effective for the other. Further, even though certain symptoms are found in both diseases, those skilled in the art would have had no difficulty in diagnosing and differentiating the two diseases; and because of the genetic and pathogenic differences between the two diseases, as discussed above, a person skilled in the art would not have had a reasonable expectation that a treatment for one disease or symptoms thereof would also be effective for the other disease or its symptoms.

Therefore, Applicants respectfully submit that the claimed methods directed to treating HD are not obvious in view of the cited prior art relating to treatment of AD. Withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of the application are respectfully requested.

Respectfully submitted,



Xiaochun Zhu
Registration No. 56,311

Scully, Scott, Murphy & Presser, P. C.
400 Garden City Plaza-STE 300
Garden City, New York 11530
Telephone: 516-742-4343 (XZ:ab)
Enc.: Exhibit 1